



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

January 13, 2012

Via E-Mail

Mr. Dean L. Cash
ATEL Growth Capital Fund 8, LLC
600 California Street, 6th Floor
San Francisco, California 94108

**Re: ATEL Growth Capital Fund 8, LLC
Registration Statement on Form S-1
Filed December 20, 2011
File No. 333-178629**

Dear Mr. Cash:

We have reviewed your registration statement and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. Prior to the effectiveness of your registration statement, please arrange to have a representative of the Financial Industry Regulatory Authority, or FINRA, call us to confirm that FINRA has finished its review and has no additional concerns regarding the underwriting arrangements, or send us a copy of the confirmation letter you have received from FINRA.
2. Please add a bullet point disclosure on the risk that investors may incur tax liability in excess of cash contributions in a particular year. Please also disclose this item in the Summary section.
3. Please revise the commission legend to remove the wording "nor has any state securities commission." See Item 501(b)(7) of Regulation S-K.

Summary of the Offering – Plan of Distribution, page 8

4. Please clarify, consistent with the disclosure on page 68, that Units acquired by the Manager or its Affiliates and participating broker dealers and their affiliates will not be applied to the requirement that a minimum of 120,000 Units be purchased by all subscribers.

Conflicts of Interest, page 30

5. We note the statement in the first paragraph that the conflicts include, “but are not limited to,” those listed. Please revise to discuss all known material conflicts of interests.

Prior Performance Summary, page 37

6. Please advise or expand your narrative summary describing your experience in the last ten years with all programs regardless of the investment objectives to include the following:
 - the number of programs sponsored;
 - the total amount of money raised from investors;
 - the total number of investors;
 - the aggregate dollar amount of equipment purchased; and
 - the approximate percentage of the overall data that represents activities of programs with similar investment objectives.

Refer to Section 8(A)(1) of the Securities Act Industry Guide 5.

Income, Losses and Distributions, page 41

Return of Unused Capital, page 43

7. We note that any net offering proceeds received by the Fund during the first twelve months of the offering that have not been committed to investment in portfolio assets by a date twenty four months after the beginning of the offering, and any net offering proceeds received during a second year of the offering that have not been committed to investment by a date twelve months after the end of the offering (except for amounts used to pay operating expenses or required as capital reserves) will be returned pro rata by the Fund to investors. Please disclose when such payments will be returned under these circumstances.

Management's Discussion and Analysis of Financial Condition, page 45

8. You state that portfolio assets will generally be amortized over the terms of the financing transactions. Please expand your disclosures to further address how you intend to account for the portfolio assets by addressing the following:
- You will provide acquisition financing of equipment and other capital assets for emerging growth companies and established privately held companies. These investments will primarily be structured as debt and debt-like financings (such as loans and leases) that are collateralized by equipment and other capital assets. Please further clarify how you intend to account for this equipment, including why you would be recording amortization expense related to these assets and the appropriateness of the periods over which you will be recording amortization expense. For any leased equipment, please address whether you expect them to be accounted for as sales-type, direct financing, leveraged, or operating leases. Refer to ASC 840-10-25-43; and
 - Please disclose how you expect to account for the equity interests and other investments in companies.

Selling Compensation and Certain Expenses, page 66

9. We note disclosure in the fourth paragraph on page 67 that the Manager has agreed to indemnify the participating broker dealers, including the Dealer Manager against certain liabilities. Please furnish a brief description of such indemnification provisions. See Item 508(g) of Regulation S-K.

Investments by Certain Persons, page 68

10. We note that the Manager and its Affiliates may acquire units. Please confirm, if true that other than the 50 units issued to AGC 8 Managing Member, LLC disclosed in Item 15 of Part II:
- no offers were made prior to the filing of the registration statement;
 - subsequent offers were made only with the prospectus; and
 - no funds have or will be committed or paid prior to effectiveness of the registration statement.

Reports to Holders, page 68

11. Please tell us why the annual and quarterly reports will be provided within 120 and 60 days, respectively, of the end of the applicable periods rather than with 90 and 45 days, as required by Part 15 of Industry Guide 5.

Supplemental Sales Material, page 70

12. Please submit all sales material to us prior to its use, whether it is to be used before or after the registration statement is declared effective. The sales literature is required to present a balanced discussion of the risks and rewards of investing in the fund.

Financial Statements of ATEL Growth Capital Fund 8, LLC

Notes to the Financial Statements

Note 2 - Summary of Significant Accounting Policies

Subsequent Events, page F-6

13. You evaluated all events subsequent to December 13, 2011 through December 19, 2011, which is the date the audited balance sheet was available for issuance. Please revise your disclosures to state, if true, that this is the date the financial statements rather than just the balance sheet were available for issuance. Refer to ASC 855-10-50-1.

Exhibit A

Prior Performance Information

Table I – Experience In Raising and Investing Funds, page A-4

14. Instruction one to Table I of Appendix II to the Securities Act Industry Guide 5 states that you should only include information for programs whose offering closed in the most recent three years. Based on the dates of the offerings provided and corresponding lengths of the offerings, it appears that certain of the offerings closed prior to this period, including ATEL Growth Capital Fund II and ATEL Growth Capital Fund III. Please advise or revise as necessary. In a similar manner, please address the appropriateness of the programs provided in the remaining tables in Exhibit A.
15. Please advise or disclose for each program the number of months to invest 90% of the amount available for investment. Refer to Table I of Appendix II to the Securities Act Industry Guide 5

Table II- Compensation to the Managing Member, page A-5

16. Please advise or disclose the dollar amount of equipment sales and refinancings before deducting payments to the managing member and the amount paid to the managing member from property sales and refinancing. Refer to Table II of Appendix II to the Securities Act Industry Guide 5.

17. Please advise or present in a separate column the aggregate payments made to the managing member in the most recent three years from all other programs and indicate the number of programs involved. Refer to Instruction one to Table II of Appendix II to the Securities Act Industry Guide 5.

Table V – Acquisition of Equipment and Notes Receivable by Prior Programs, page A-13

18. Please advise or disclose the dates the equipment or investments were acquired. Refer to Table VI of Appendix II to the Securities Act Industry Guide 5. Please also consider switching the numbering of Table V and Table VI to be consistent with the tables in the Securities Act Industry Guide 5.

Table VI – Sales or Disposals of Equipment by Prior Programs, page A-18

19. Please advise or disclose the acquisition and sale date of the equipment listed as well as the excess (deficiency) of operating cash receipts over cash expenditures. Refer to Table V of Appendix II to the Securities Act Industry Guide 5.

Undertakings, page II-2

20. Please include the undertaking specified in Item 512(f) of Regulation S-K as this undertaking applies to “best efforts” and “minimum-maximum” underwritten offerings.

Exhibits, page II-5

21. Please file your limited liability company articles of organization filed with the California Secretary of State. See Item 601(b)(3)(i) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Act of 1933 and all applicable Securities Act rules require. Since the company and its management are in possession of all facts relating to a company’s disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Nudrat Salik, Staff Accountant at (202) 551-3692 or, in her absence, Rufus Decker, Accounting Branch Chief at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence me at (202) 551-3760 with any other questions.

Sincerely,

/s/ Pamela Long

Pamela Long
Assistant Director

Cc: Via E-mail
Paul J. Derenthal, Esq.